

STANDARD DRAWINGS

RIVERSIDE COUNTY FLOOD CONTROL STANDARD DRAWINGS

JS228 JUNCTION STRUCTURE NO. 3
TS301 TRANSITION STRUCTURE NO. 1
CH326 TRAPEZOIDAL CHANNEL DETAILS
CH332 SUBDRAINS

CALTRANS STANDARD PLANS, JULY 1992

D80 CAST-IN-PLACE REINFORCED CONCRETE SINGLE BOX CULVERT
D86A BOX CULVERT WARPED WINGWALLS

CITY OF RIVERSIDE STANDARD DRAWING

380 CHAIN LINK FENCE AND GATE
412 C.S.P. INLET
421 JUNCTION STRUCTURE B
452 PIPE BEDDING
456 TIMBER BULKHEADS

CONSTRUCTION NOTES:

- 10 INSTALL 14' DOUBLE DRIVE GATE PER CITY OF RIVERSIDE STD. DWG. NO. 380.
13 CONSTRUCT CHAIN LINK FENCE PER CITY OF RIVERSIDE STD. DWG. NO. 380 (FABRIC=72").
14 PLACE 6" THICK CRUSHED AGGREGATE OVER COMPACTED NATIVE.

BASIS OF BEARING:

BASIS OF BEARING IS THE CENTERLINE OF BOX SPRINGS ROAD AS SHOWN ON MAP BOOK 81 PAGES 3 THRU 4 THEREOF, RECORDS OF RIVERSIDE COUNTY, STATE OF CALIFORNIA, BEING N35°28'00"W.

EXISTING UNDERGROUND STRUCTURES

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPE STRUCTURES OR CONDUITS SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

NOTICE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

BENCHMARK: 600-47-68

U.S.C. & G.S. DESIGNATION Z 749, RIVERSIDE COUNTY DESIGNATION 600-47-68, STANDARD BRASS DISK STAMPED Z 749 1945 ESTABLISHED BY C. & G.S. 1.7 MILES NORTHWEST ALONG THE ATCHINSON, TOPEKA AND SANTA FE RAILWAY FROM THE STATION AT MARCH FIELD, SET BETWEEN THE TRACK AND U.S. HIGHWAY NO. 1-215 64.5 FEET SOUTHWEST OF THE SOUTHWEST EDGE OF THE HIGHWAY, 43.6 FEET NORTHEAST OF THE NORTHEAST RAIL OF TRACK, 20 FEET SOUTHEAST OF POST, BENCHMARK DISK SET IN TOP OF A CONCRETE POST 0.4 FEET ABOVE GROUND.

DATE: 1970 ELEVATION: 1536.119



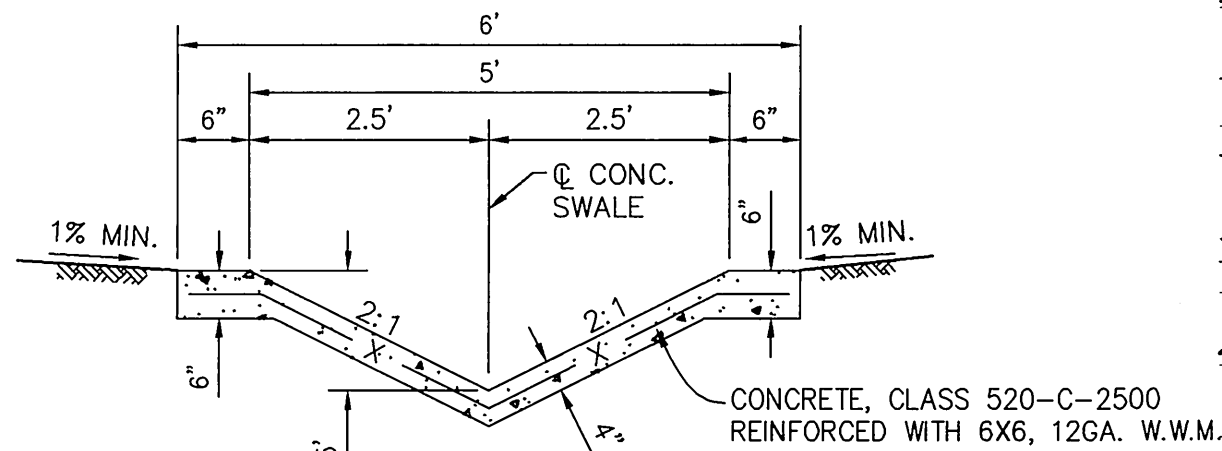
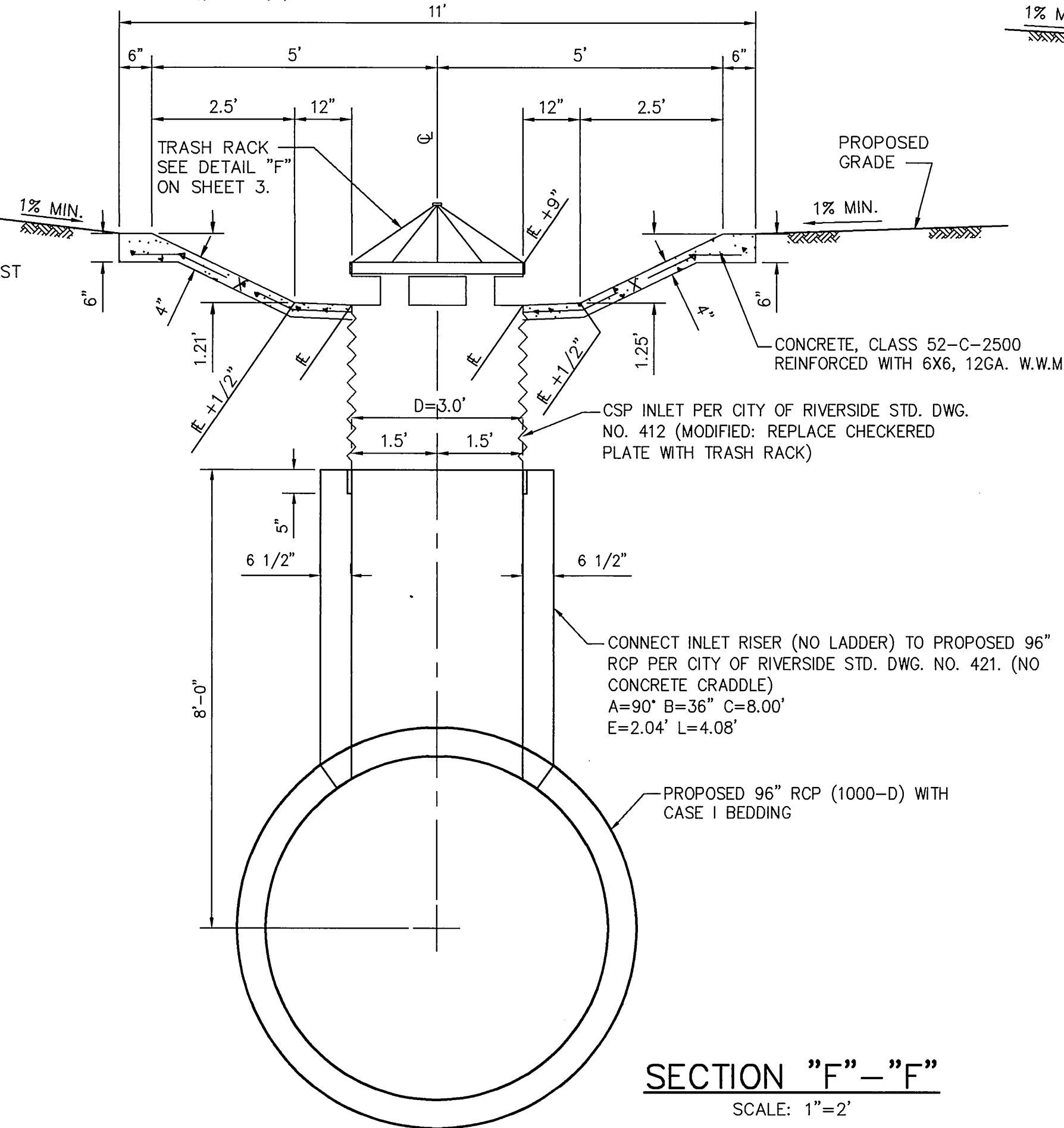
SCALE: 1"=100'

BEGIN CONSTRUCTION

END CONSTRUCTION

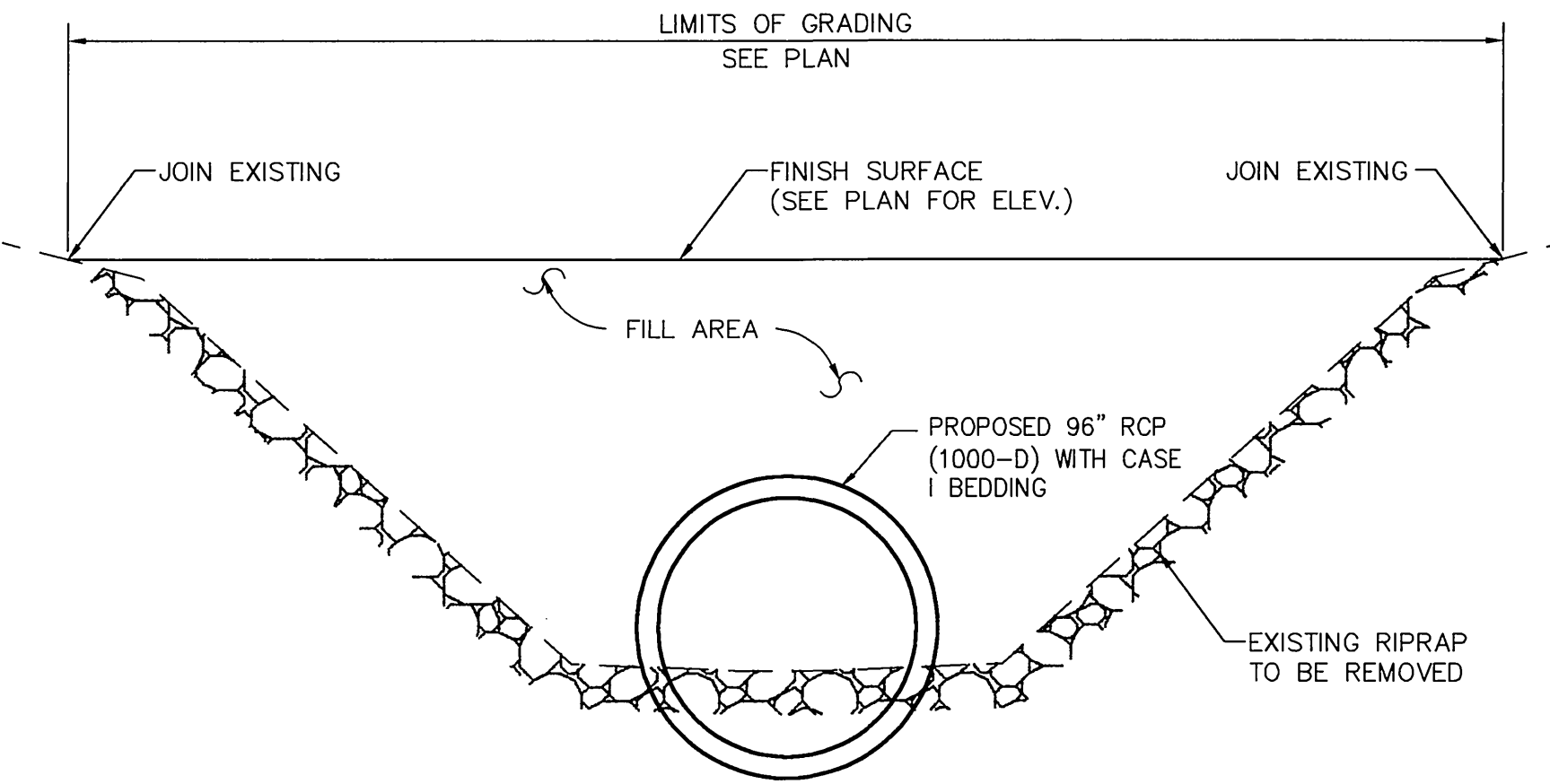
INDEX MAP

SCALE 1"= 100'



SECTION "G"- "G"

SCALE: 1"=2'



SECTION "H"- "H"

N.T.S.

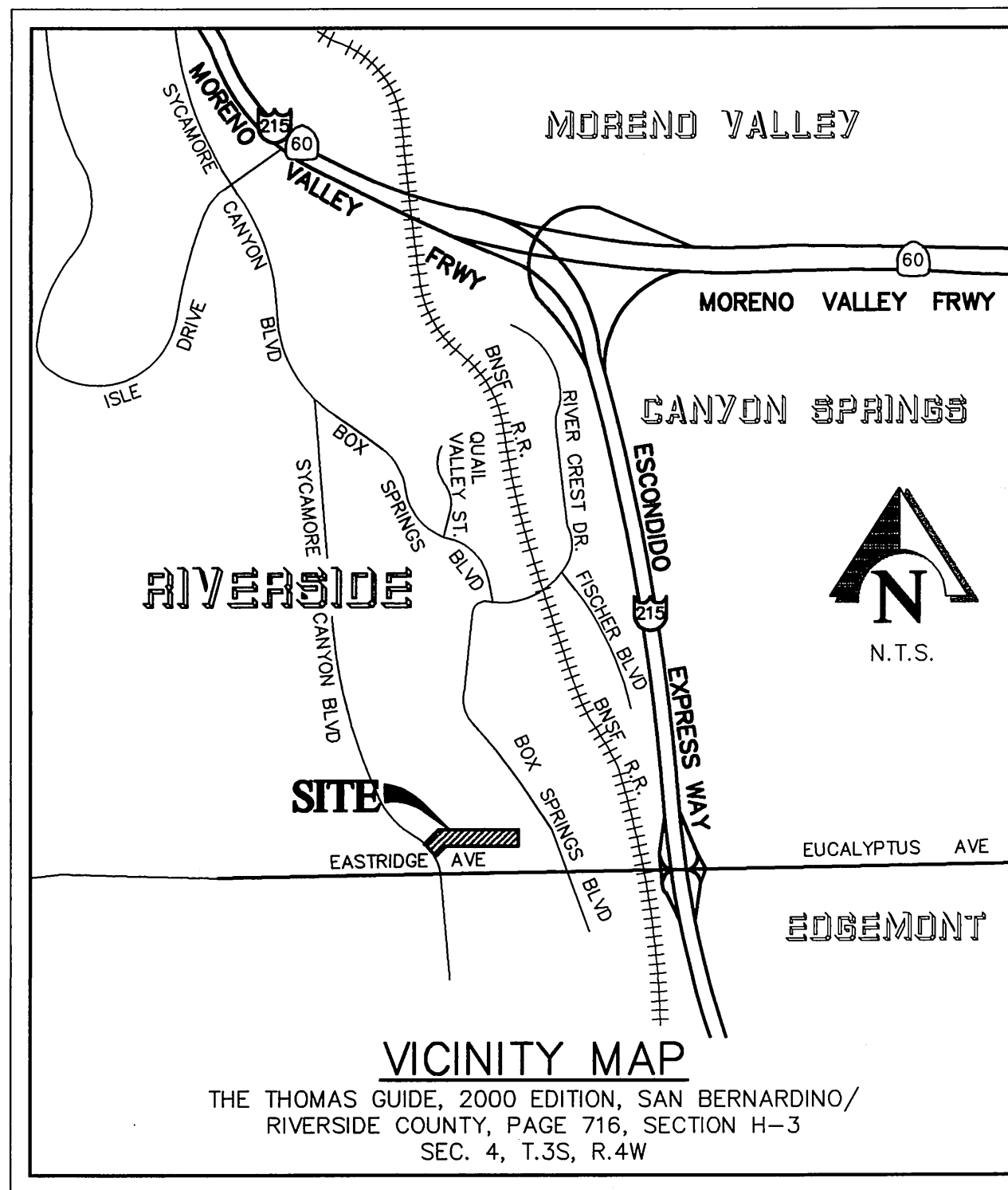
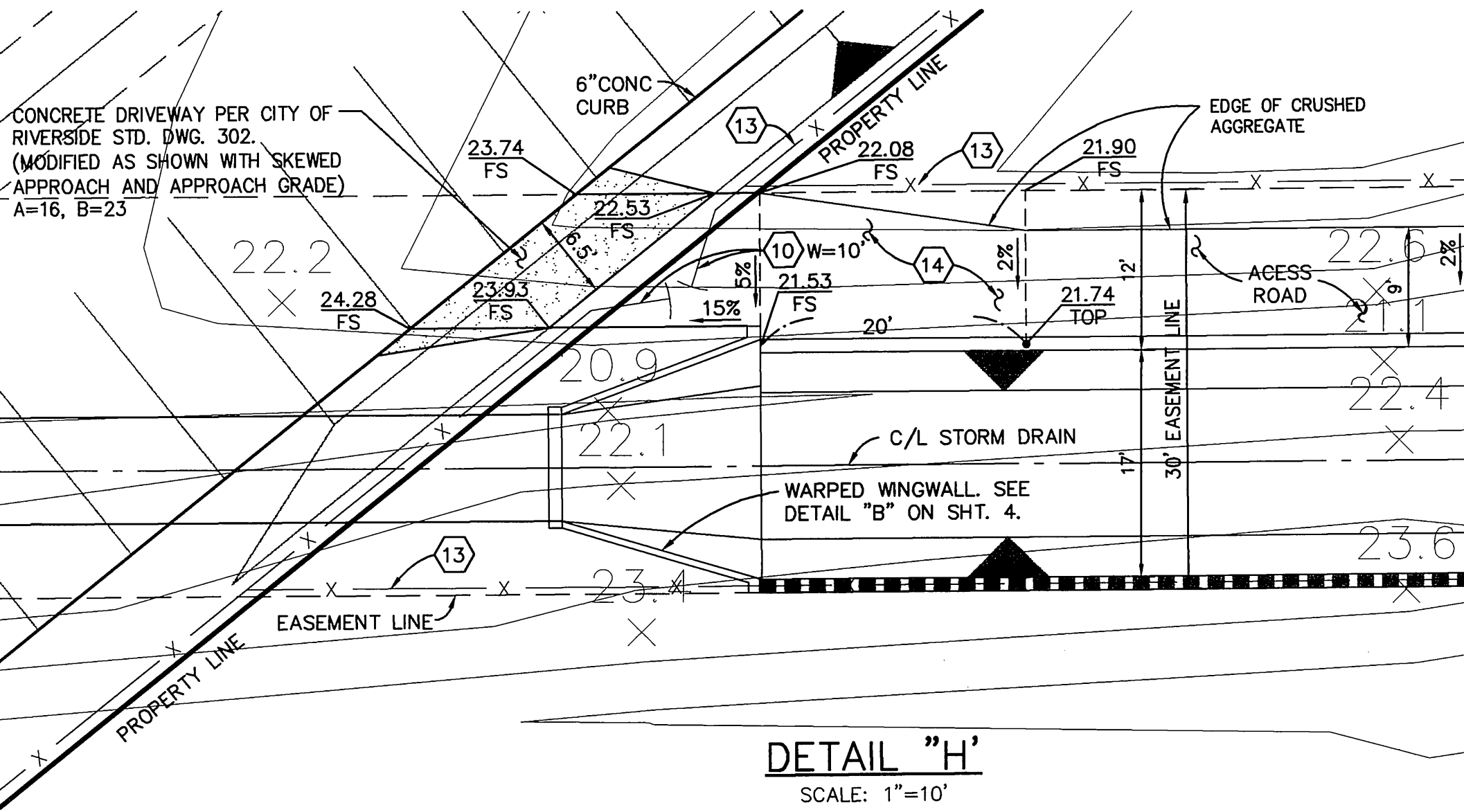
* TRAP CHANNEL REINFORCEMENT BY STEEL FIBERS

SECTION "F"- "F"

SCALE: 1"=2'

GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT-OF-WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
3. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
4. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE NO. 1-800-227-2600 TWO WORKING DAYS BEFORE DIGGING. NO CONSTRUCTION PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY U.S.A.
5. ALL SECTIONS ARE PLOTTED LOOKING DOWNSTREAM.



* AS-BUILT 6-05-03 LHL

METROPOLITAN WATER DISTRICT
AN APPROVAL LETTER FOR THE CONSTRUCTION OF THE STORM DRAIN OVER WHO'S EXISTING WATERLINE DATED JUNE 27, 2001 (SUBSTR. JOB NO. 4040-01-001) IS AVAILABLE FROM THE CITY OF RIVERSIDE, PUBLIC WORKS DEPARTMENT.
CONTACT KIERAN CALLANAN @ (213) 217-7474 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

Underground Service Alert
Call: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE
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SEAL
TERESITO N. TABIOLLO
REGISTERED CIVIL ENGINEER
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
TERESITO N. TABIOLLO
REGISTERED CIVIL ENGINEER NO. 38826
EXPIRATION DATE: 3-31-05 DATE: 3-12-02

KCT CONSULTANTS, INC.
Civil Engineers - Surveyors - Planners
P.O. Box 5705 Riverside, CA 92517-5705
4344 Latham St., Suite 200, Riverside, CA 92501
Phone: 951-541-5540 Fax: 951-541-5545
e-mail: kctinfo@kctconsultants.com
CITY BUSINESS TAX CERTIFICATE NO.: 069540 EXP. DATE: 04-07-02
BENCHMARK: SEE ABOVE
SEE ABOVE

MARK REVISIONS
DESIGNED BY: T.N.T. DRAWN BY: L.S. CHECKED BY: T.N.T.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: DATE: BY: APPROVED BY: DATE: BY:
DEPUTY P.W. DIRECTOR 3/12/02 2 PUBLIC WORKS DIRECTOR 3/12/02 2
PRINCIPAL ENGINEER 3/12/02 1w
STREET SERVICES 3/12/02 1w

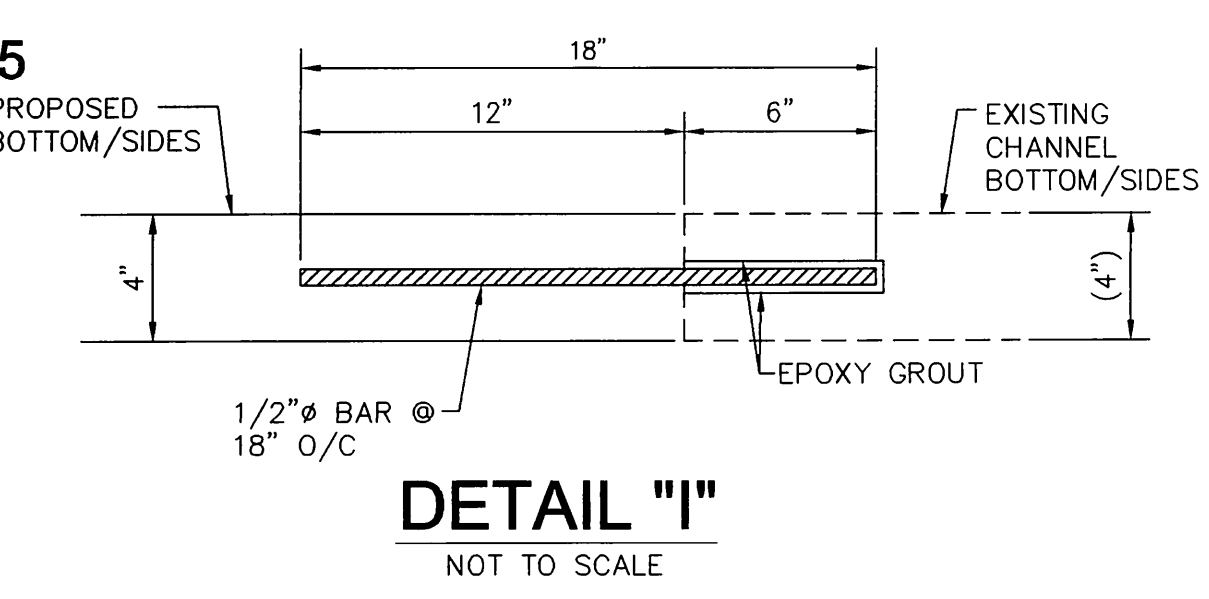
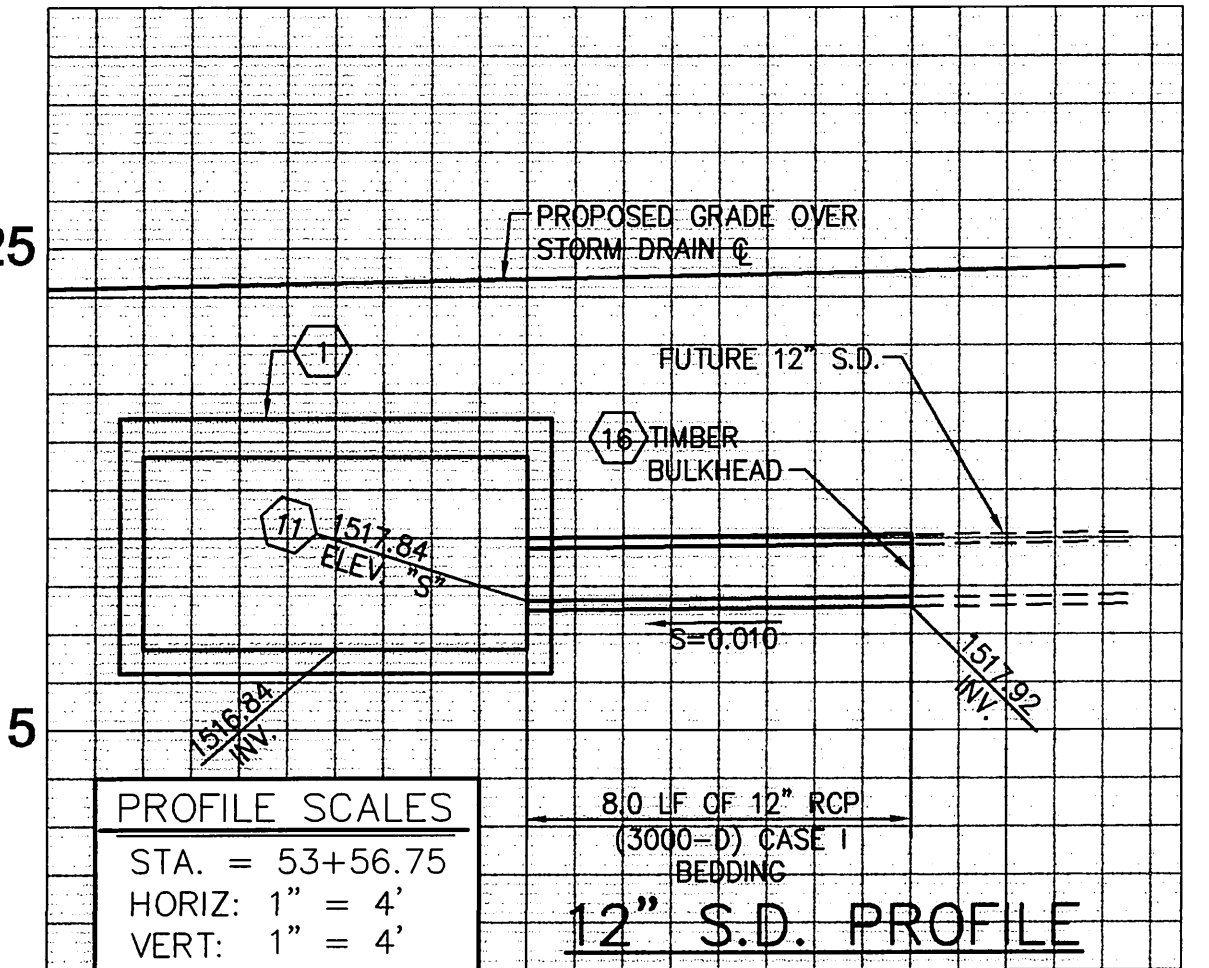
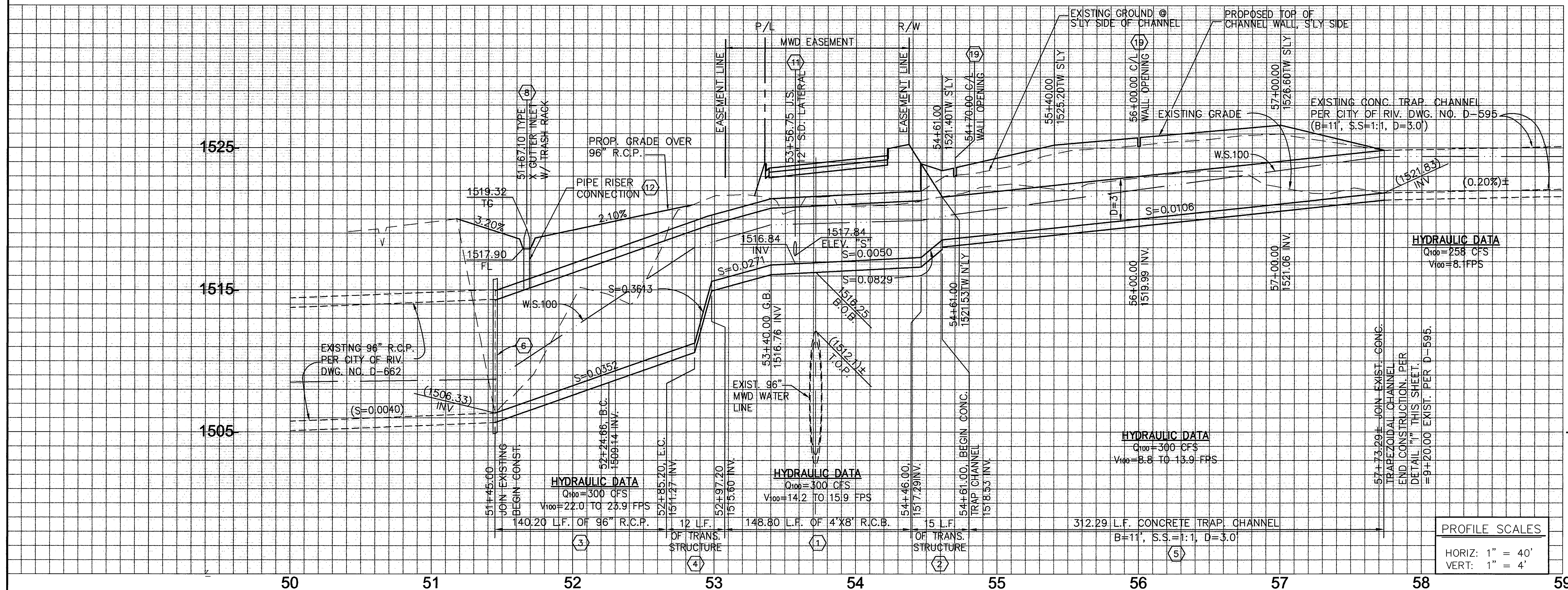
CANYON SPRINGS
ASSESSMENT DISTRICT
BOX SPRINGS STORM DRAIN
TITLE SHEET
FROM SYCAMORE CANYON BLVD. TO 650'± E'LY
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN

ACCOUNT NO. D-699
SHEET 1 OF 4
FILE NO.: 1177-01

INDEXED 5-09-02 LHL

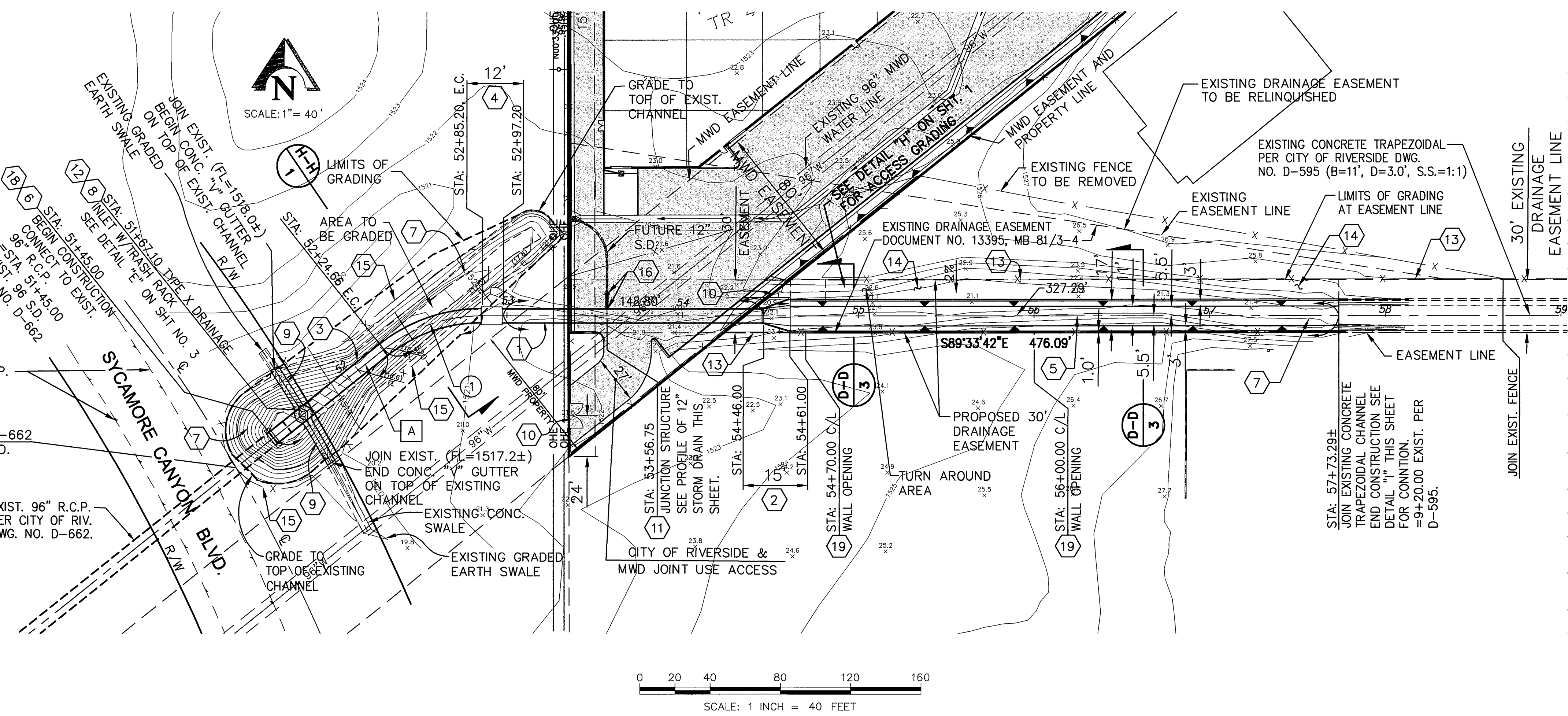
SITE [H: 1177-01 - Box Springs Canyon Storm Drain - 6-05-03.dwg]
NOTES [H: 1177-01 - Box Springs Canyon Storm Drain - 6-05-03.dwg]
BLOCK [H: 1177-01 - Box Springs Canyon Storm Drain - 6-05-03.dwg]

H: 1177-01 - Box Springs Canyon Storm Drain - 6-05-03.dwg
Plot Date: March 12, 2002 - 8:28am | Lori



STORM DRAIN CL CURVE DATA
① R=90.00'
Δ=38°32'30"
T=31.47'
L=60.54'
BC STA.=52+24.66
EC STA.=52+85.20

STORM DRAIN CL LINE DATA
A S51°01'12"W 79.66'
24"
12" 12"
6"
TOP OF WALL (TYPICAL)
BOTTOM OF OPENING TO MATCH EXISTING GROUND
DETAIL "J"
NOT TO SCALE
STA. 51+12.39 @ EXIST. S.D. PER DWG. D-662
=STA. 74+00.97 @ SYCAMORE CANYON RD.



- CONSTRUCTION NOTES:**
- ① CONSTRUCT 8'X4' RCB PER DETAIL "A" (CALTRANS STD. PLAN D80).
 - ② CONSTRUCT WARPED WINGWALL PER DETAIL "B" (CALTRANS STD. PLAN D86A).
 - ③ CONSTRUCT 96" R.C.P. 1000-D WITH CASE I BEDDING PER CITY OF RIVERSIDE STD. DWG. NO. 452.
 - ④ CONSTRUCT TRANSITION STRUCTURE NO. 1 PER RIV. CO. FLOOD CONTROL STD. DWG. NO. TS301.
 - ⑤ CONSTRUCT CONCRETE TRAPEZOIDAL CHANNEL SEE SECTION "D-D" ON SHEET 3.
 - ⑥ CONSTRUCT CONCRETE COLLAR PER DETAIL "C" ON SHEET 3.
 - ⑦ REMOVE EXISTING RIPRAP.
 - ⑧ CONSTRUCT C.S.P. DRAINAGE INLET W/TRASH RACK PER CITY OF RIVERSIDE STD. DWG. NO. 412 (MODIFIED: REPLACE CHECKERED PLATE WITH TRASH RACK. SEE DETAIL "F" ON SHEET 3). SEE CONSTRUCTION NOTE 12 FOR CONNECTION TO 96" R.C.P.
 - ⑨ CONSTRUCT CONCRETE "V" DITCH CHANNEL PER SECTION "G-G" ON SHEET 1.
 - ⑩ INSTALL 14' DOUBLE DRIVE GATE PER CITY OF RIVERSIDE STD. DWG. NO. 380.
 - ⑪ CONSTRUCT JUNCTION STRUCTURE PER RIVERSIDE COUNTY FLOOD CONTROL STD. DWG. NO. JS228 (CASE II).
 - ⑫ CONNECT INLET RISER (NO LADDER) TO 96" R.C.P. PER CITY OF RIVERSIDE STD. DWG. NO. 421, SEE SECTION "F-F" ON SHEET NO. 1.
 - ⑬ CONSTRUCT CHAIN LINK FENCE PER CITY OF RIVERSIDE STD. DWG. NO. 380 (FABRIC=72").
 - ⑭ PLACE 6" THICK CRUSHED AGGREGATE OVER COMPACTED NATIVE.
 - ⑮ REMOVE EXISTING CHAIN LINK FENCE AND SECURITY GATE.
 - ⑯ PLACE 8 L.F. OF 12" RCP STORM DRAIN (3000-D) WITH CASE I BEDDING. INSTALL TIMBER BULKHEAD AT END OF PIPE PER CITY OF RIVERSIDE STD. DWG. 456.
 - ⑰ CONSTRUCT SUB-DRAIN PER RIVERSIDE COUNTY FLOOD CONTROL STD. DWG. NO. CH332.
 - ⑱ EXISTING TRASH RACK TO BE REMOVED.
 - ⑲ CONSTRUCT 24" WIDE WALL OPENING PER DETAIL "J" ON SHEET NO. 2.

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SEAL
REGISTERED PROFESSIONAL ENGINEER
TERESITO N. TABILOLO
RCE No. 38826
Exp. 3-31-05
STATE OF CALIFORNIA
CIVIL

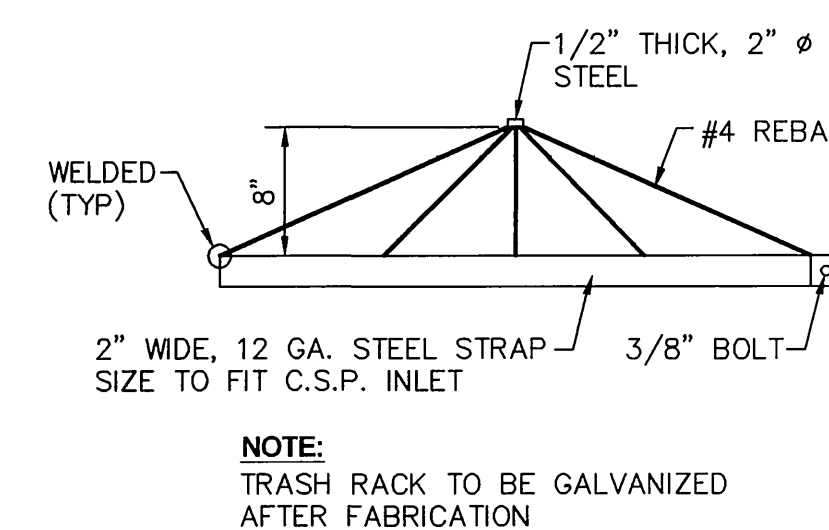
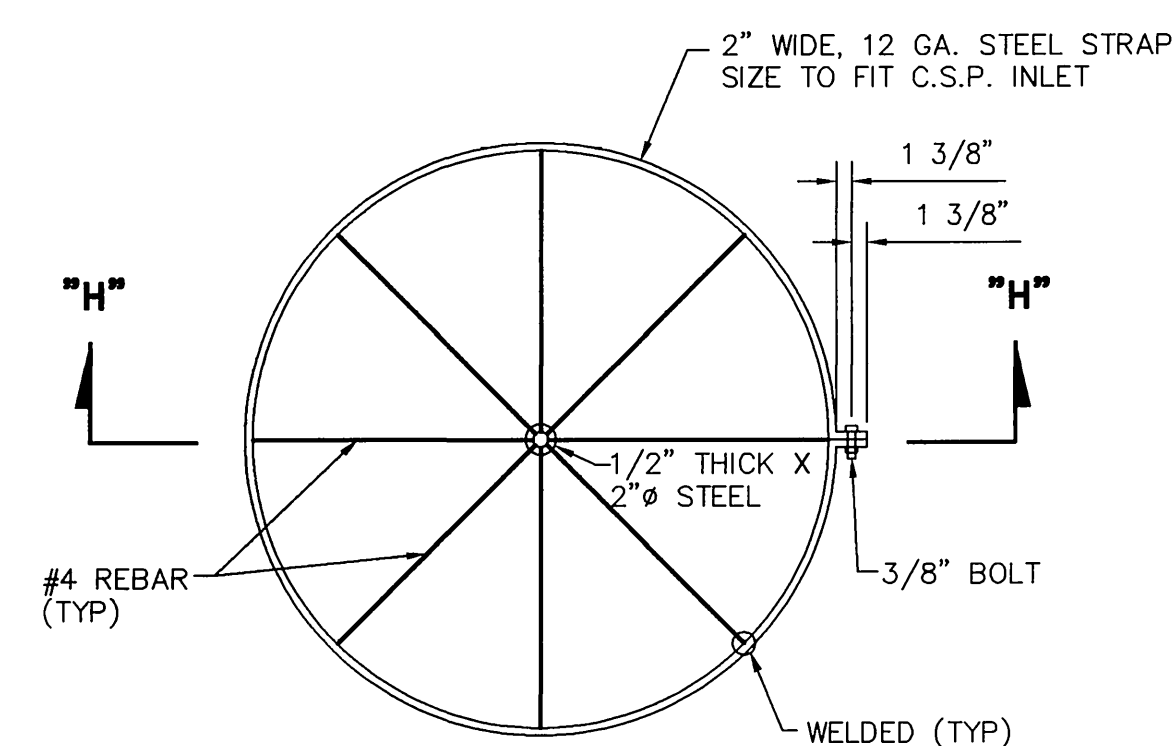
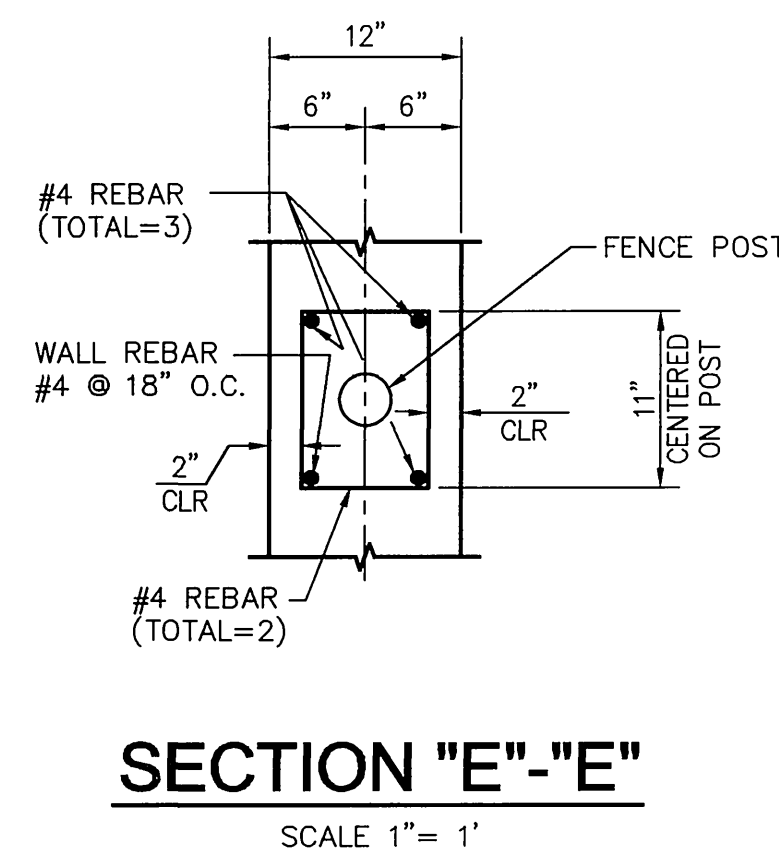
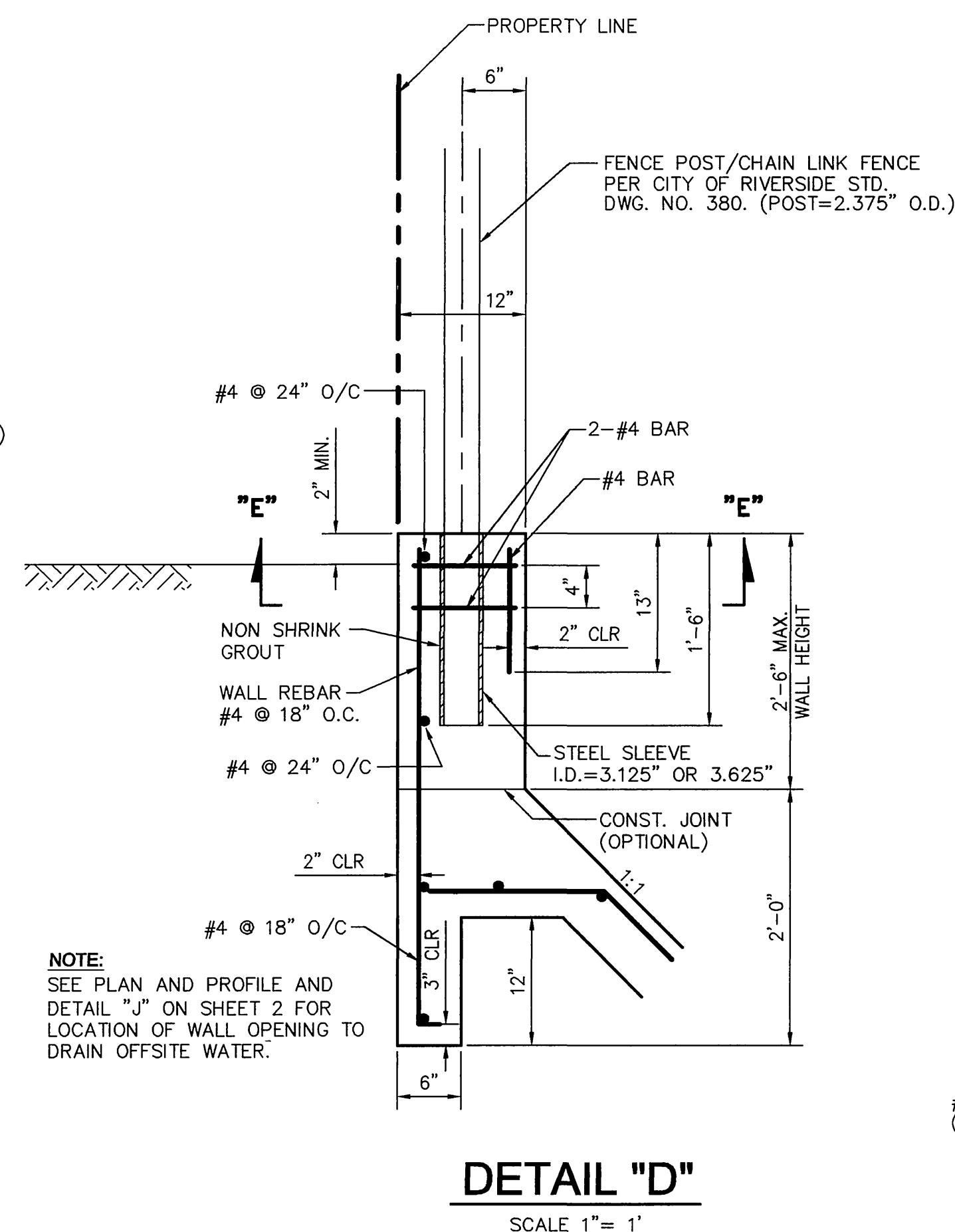
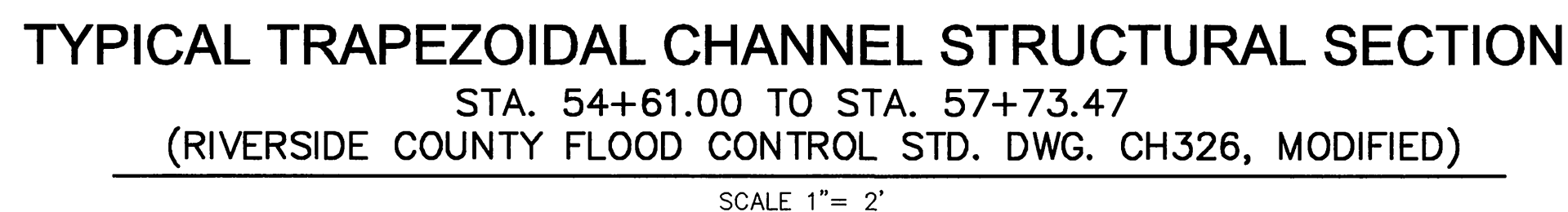
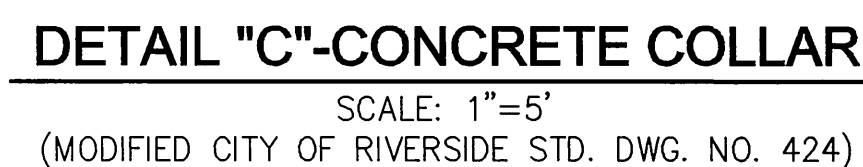
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e-mail: kctinc@kctconsultants.com
CITY BUSINESS TAX CERTIFICATE NO.: 069540 EXP. DATE: 04-07-02
BENCHMARK:
SEE SHEET 1

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: DATE: BY: APPROVED BY:
DEPUTY P.W. DIRECTOR DATE: BY: PUBLIC WORKS DIRECTOR
PRINCIPAL ENGINEER
MARK REVISIONS APPR. DATE
DESIGNED BY: T.N.T. DRAWN BY: L.S. CHECKED BY: T.N.T.

CANYON SPRINGS
ASSESSMENT DISTRICT
BOX SPRINGS STORM DRAIN
FROM SYCAMORE CANYON BLVD. TO 650± E'LY
HORIZ. SCALE: AS SHOWN VERT. SCALE: AS SHOWN
FILE NO.: 1177-01

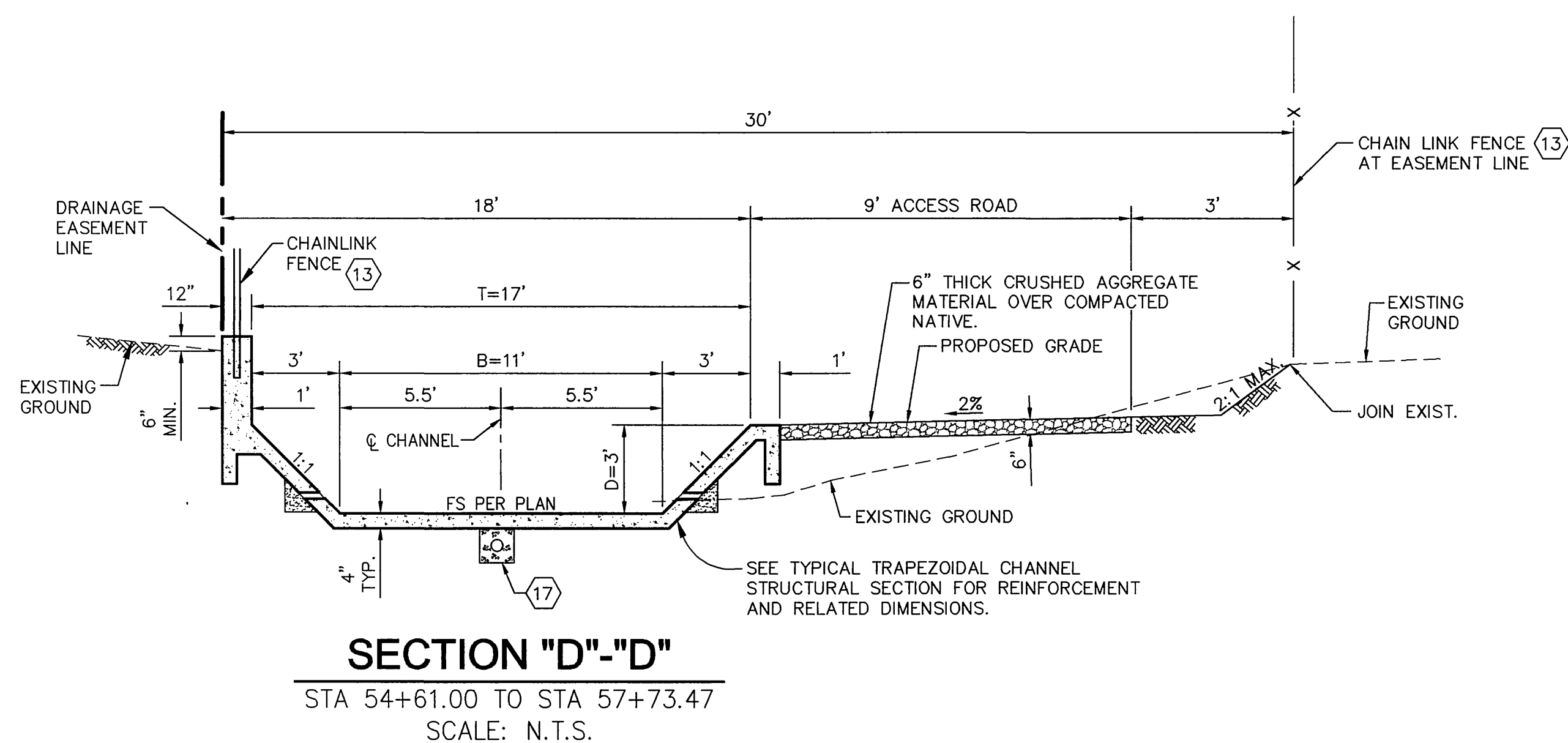
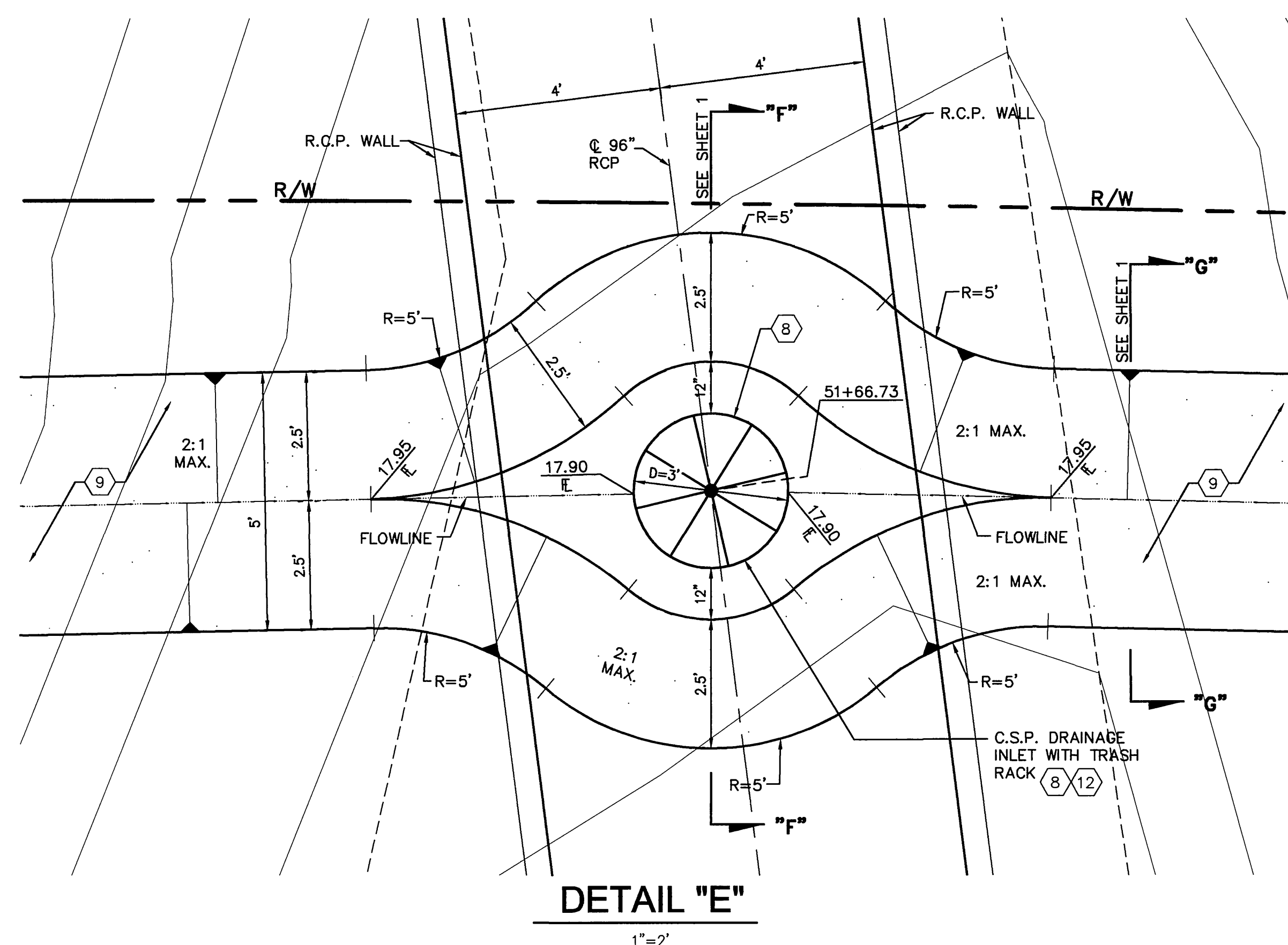
ACCOUNT NO. D-699
SHEET 2 OF 4
INDEXED 5-09-02



SECTION "H"-"H"
SCALE 1"= 1'

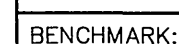
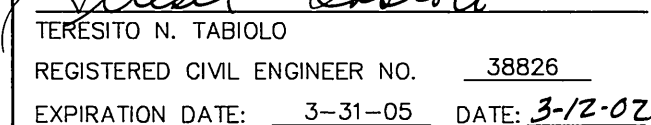
CONSTRUCTION NOTES:

- 8 CONSTRUCT C.S.P. DRAINAGE INLET W/TRASH RACK PER CITY OF RIVERSIDE STD. DWG. NO. 412 (MODIFIED: REPLACE CHECKERED PLATE WITH TRASH RACK. SEE DETAIL "F" ON SHEET 3). SEE CONSTRUCTION NOTE 12 FOR CONNECTION TO 96" R.C.P.
- 9 CONSTRUCT CONCRETE "V" DITCH CHANNEL PER SECTION "G-G" ON SHEET 1.
- 12 CONNECT INLET RISER (NO LADDER) TO 96" R.C.P. PER CITY OF RIVERSIDE STD. DWG. NO. 421, SEE SECTION "F-F" ON SHEET NO. 1.
- 13 CONSTRUCT CHAIN LINK FENCE PER CITY OF RIVERSIDE STD. DWG. NO. 380 (FABRIC=72").
- 17 CONSTRUCT SUB-DRAIN PER RIVERSIDE COUNTY FLOOD CONTROL STD. DWG. NO. CH332.



Call: TOLL FREE
1-800
227-2600

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SEE SHEET 1

[illegible]

STREET SERVICES 3/12/02 1001 DATE: 3/19/02

HORIZ. SCALE: AS SHOWN	VERT. SCALE: AS SHOWN	FILE NO.: 1177-01
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SHEET 3 OF 4

FILE NO.:	1177-01
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* AS-BUILT 6-05-03 FH

INDEXED 5-09-02 LKH

TITLE [H:\1177\01-BoxSprings\Engr\Storm\STD-TITLE.dwg]
SITE [H:\1177\01-BoxSprings\Engr\01-eng-site.dwg]
CNOTES [H:\1177\01-BoxSprings\Engr\Storm\SD-CNOTES.dwg]

4: \\1177\01-BoxSprings\Engr\Storm\01sd-dt03.dwg
Plot Date: March 11, 2002 - 4:37pm | Lori



6"

1" CLEAR

6"

1" CLEAR

FOR REINF. SEE TABLE AT RIGHT

SLOPE VARIES (1:1 TO VERTICAL)

#4@12" o/c

2'-6"

#4x5'-0" DOWELS @ 12" o/c

7'

6"

6"

1" CLEAR

#4 BARS (TOT.=3)

1'-4"

#4@18" (MAX.) o/c

#4@18" (MAX.) o/c

VARIES: 3' @ STA. 54+61.00
6.21 @ STA. 54+46.00

SECTION "B" - "B"
(CALTRANS STD. DWG. NO. D86A, MODIFIED).

1/4:1	FRONT FACE REINF. REAR FACE REINF.	#4 @ 12 #4 @ 12
1/2:1	FRONT FACE REINF. REAR FACE REINF.	#4 @ 12 #4 @ 12
3/4:1	FRONT FACE REINF. REAR FACE REINF.	#4 @ 12 #4 @ 8
	"D" AT CUT-OFF WALL	6"
	"D" AT CULVERT	6"

SECTION "C" - "C"
(CALTRANS STD. DWG. NO. D86A, MODIFIED).

DETAIL "B"

DETAIL "B"
BOX CULVERT WARPED WINGWALL
(CALTRANS STANDARD DWG. NO. D86A (MODIFIED))

[illegible]

SECTION "A" - "A"
(CALTRANS STD. DWG. NO. D86A, MODIFIED)

INDEXED 5-09-02 LHH